COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

June 12, 2006 Meeting

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Donna Silverberg Notes: Robin Harkless

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

Priest Rapids Update

Russell Langshaw, Grant County PUD, reported that protection flows ended on June 9, with minimum protection flows met on all but an hour on June 8, which was down to 148.3 kcfs. Russell will provide an annual report with TMT upon completion, in the next couple months. TMT members offered that the graphs were a good addition to the information shared this year.

Dworshak SOR

Kyle Dittmer, CRITFC, shared that model runs from EPA will be available for the salmon managers during a special FPAC meeting on Thursday, June 15. Tom Lorz, CRITFC, will present the models at the June 28 TMT meeting. Dave Statler, Nez Perce, noted that revisions were made to the SOR presented at the last TMT (the updated SOR can be found linked to today's TMT agenda). They included a language change in the introduction emphasizing the Nez Perce interest in avoiding 68° instead of meeting the temperature. Also, graphs were provided with information on Clearwater fish data. TMT will discuss the SOR in more detail at the next TMT meeting.

Adult Population Chum Error Bounds

Rick Kruger, ODFW, provided information requested about adult chum counts and error bounds. In 2002, the total count was 4,232 with an error bound of ± 120 . In 2003, the count was 667 with an error bound of ± 163 . In 2004, the count was 336 with an error bound of ± 182 . Bounds are set by water conditions, with the most challenging conditions causing the greatest error bounds. Rick will share final counts for 2005 when they are available. It was noted that the purpose of the inquiry was to better understand the difficulty in counting chum and to point out that chum operations are very important and affect the entire federal power system.

Operations Review

Reservoirs: Grand Coulee was at elevation 1281' (9' from full) and filling, maintaining flood control. Hungry Horse was at elevation 3553' (7' from full) and releasing 7 kcfs. The BOR plans to ramp outflows down soon. Libby was at elevation 2457.4' (1.6' from full), and spilling with 35 kcfs in and 38 kcfs out. The project has experienced its third 'peak' this year. TDG levels were currently around 125%. Bonners Ferry had been

forecasted above flood stage elevations but so far has remained just below that level. Dworshak was at elevation 1590.2' (9.8' from full), with 12 kcfs in and 5.3 kcfs out due to the outage. Peak regulated flow at The Dalles is 3.91 k and unregulated is 850-900. The project has been operating at full powerhouse for over a month.

Fish: Paul Wagner, NOAA, reported that the final adult spring chinook count at Bonneville was 96,458 (slightly above the forecasted number). Summer chinook counts at Bonneville were 19,502. TAC has switched its count date for summer chinook to mid-June, vs. June 1. The yearling smolt run is nearing its end, with numbers less than 1,000. Subyearlings are at 40,000+ at Little Goose and 30,000+ in the lower river. Steelhead smolt numbers are on a downward trending at each of the projects. Paul showed the season wrap-up graphs from the FPC website, and DART numbers showing wild fish, which peaked in late April and have a protracted migration.

Power: John Wellschlager, BPA, reported that the power system is operating to meet the COE's flood control guidance. The CGS went to 65% over the weekend, and will operate to reach target flows this week. The Dworshak taft line outage started today. TBL has built in a provision for restoring the line within 6 hours if necessary to meet ESA obligations.

Water quality: Jim Adams, COE, reported that 12 of 17 sites have been exceeding TDG standards due to involuntary spill. The Lower Monumental forebay was at 125.3%, Little Goose tailwater was at 124.5%, Lower Granite tailwater was at 123.6% and Ice Harbor forebay was at 119.8%.

TMT Meeting Schedule: Wednesday, June 28, 9am-noon

Agenda Items include:

- Dworshak SOR Nez Perce
- Libby/Hungry Horse SOR Montana
- Marine Mammal Permitting Process Update Oregon and Washington
- Sturgeon Operations USFWS

Technical Management Team Meeting Notes

June 12, 2006

1. Greetings and Introductions.

Today's Technical Management Team meeting was chaired by Cathy Hlebechuk and facilitated by Donna Silverberg. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Hlebechuk and 503-808-3936.

2. Priest Rapids Update.

Russell Langshaw said protection flows ended June 9. Over the past week and a half, starting May 29, a 150 Kcfs minimum flow was in effect at Priest Rapids. The only issue occurred on June 8, when flows dropped to 148.5 Kcfs for an hour. On June 9, the daily average flow was 221.7 Kcfs. Langshaw said he will present an annual summary of the 2006 fish protection program once he has completed his annual report, some time in the next two months.

3. Libby and Hungry Horse.

This topic was deferred until the next TMT meeting.

4. Dworshak SOR.

The TMT revisited the 2006 Dworshak SOR from the Nez Perce Tribe. Kyle Dittmer said Ben Cope had provided the first round of results from the RBM-10 water temperature model last week; unfortunately, there were some errors in the initial results. Cope subsequently re-ran the model, which now appears to be functioning correctly. I'm in the process of going through the results now, Dittmer said.

He noted that FPAC will be meeting this Thursday and will discuss the model results at that time; Dittmer said he will present those results at the next TMT meeting. Two scenarios were modeled: the 2005 TMT (actual) operation, and a second scenario, under which Dworshak would release 10 Kcfs initially, outflow would drop down to 7 Kcfs for a period, then increase to 10 Kcfs until elevation 1520 is achieved some time in mid-September. Four different weather-year scenarios were modeled, he added.

David Wills noted that one difference between the operation proposed in this SOR and previous years' Dworshak operations is that, in the past, the TMT has tried to get ahead of the temperature curve by releasing cool water earlier in the summer period, while the SOR advocates a more reactive approach. I, and some of the other salmon managers, would like to see this temperature modeling information before we make a decision about what approach to recommend, he said. While I don't want to speak for Dave Statler, Wills added, at least last week, when he spoke with the salmon managers, he and Greg Haller agreed to postpone a decision until we've had a chance to review the model results.

Dave Statler, who had difficulty accessing today's conference call, joined at this point. He said June 28, the next scheduled TMT meeting, should work for the next discussion of this topic. In response to a question, Statler noted that, with respect to growth rates for subyearlings in the Lower Clearwater River, more fish are tagged in March, which indicates that the wild fish are fairly small at that

time. It also indicates that there were some surrogate hatchery releases that year. By about July 15, less fish are being captured, and those fish that are captured are at least 80 mm in length. That coincides with the target date of July 16, which we have recommended fairly consistently, Statler said. He added that he has provided some graphs showing this information in more detail.

After a few minutes of additional discussion, it was agreed to defer a decision on the 2006 Nez Perce Tribe Dworshak SOR until the next TMT meeting on June 28.

5. Adult Population Chum Counts.

Rick Kruger said he had checked around and found three confidence intervals for adult chum population estimates: +/- 120, +/- 163 and +/- 182. That is for 2002, 2003 and 2004. In 2002, the population estimate was 4,232, +/- 120; in 2003, the population estimate was 667 +/- 163; in 2004 it was 336 +/- 182. They are still working on the 2005 population estimate, Kruger added. In response to a question, Kruger said the reason the confidence intervals have continued to grow, even as the population estimates themselves have shrunk, has to do with the way the data were collected and how good the survey information is. In response to a question, Kruger said he cannot provide a preliminary 2005 chum population estimate at this time, other than the fact that he knows the population was comparatively low.

John Wellschlager noted that, during much of the late fall and winter period, operations to protect the chum redds drive the operation of the FCRPS. We go through a lot of gyrations to ensure that the Bonneville tailwater elevation is maintained at an adequate level, he said – it would be helpful to have those numbers. And are these confidence intervals 95%? Russ Kiefer asked. I believe so, Kruger replied. And does the 336 estimate for 2004 include all known spawning areas? another participant asked. I'm not sure, but I'll find out, Kruger replied.

6. Operations Review.

Reclamation said Grand Coulee is at elevation 1281 and filling. Reclamation has been working around flood control restrictions based on the residual runoff estimate for that basin. The project will be full at elevation 1290. Priest Rapids continues to release in excess of 200 Kcfs. Hungry Horse is at elevation 3553, seven feet from full. The project is releasing 7 Kcfs, but will be ramping down soon to accommodate the planned Dworshak outage.

The Corps reported that Libby is 1.6 feet from full, at 2457.4 feet, with 45 Kcfs inflow and 38 Kcfs outflow. The project was forced to start spilling last Thursday, June 8. Jim Adams said TDG levels below Libby were 123-124 percent at 8.2 Kcfs spill; spill was subsequently increased to 14 Kcfs, which only

increased the gas level to about 125 percent, where it is currently. Most of the middle and low-level snowpack is gone, but it is raining heavily in the Libby area, and there is still significant high-elevation snowpack in that basin. The Corps noted that Libby generally doesn't fill until the end of July, so there is some nervousness about the situation in that basin. Yesterday's peak flow at Bonners Ferry was about 62 Kcfs.

Moving on, the Corps said Dworshak is 9.8 feet from full, at elevation 1590.2 feet – that's also pretty high. Inflows to the project are 12 Kcfs, and we had to reduce outflow from 10 Kcfs to 5.3 Kcfs today, due to the outage. We got a revised number from our flood control people, Hlebechuk said; the peak unregulated flow at The Dalles this year was between 850 and 900 Kcfs. The peak regulated flow was 391 Kcfs.

Moving on to fish, Paul Wagner said the 2006 adult spring chinook count turned out much better than they looked in mid-April, with a total of 96,400 adults past the project. The summer chinook run is off to a good start as well, he added. He said yearling chinook indices continue to decline at the Lower Snake projects, while subyearling chinook indices continue to be strong.

Hlebechuk said there is nothing new to report on the John Day T1 outage. With respect to the Dworshak outage, Wellschlager reminded the group of the necessity of this kind of maintenance work to ensure transmission system reliability. Again, the outage will run from June 12-30, and is part of a larger two-year scheduled transmission system maintenance effort, he explained.

Adams briefly reviewed the current water quality situation in the FCRPS, noting that, since the last TMT meeting, numerous exceedences have occurred. We're currently exceeding the TDG standards at 12 of our 17 monitoring sites, he said. There is a significant amount of involuntary spill throughout the system, particularly during nighttime hours, due to lack of load. The TDG hot spots in the system are the Little Goose tailwater (124.5%) and Lower Monumental forebay (125%).

Silverberg noted that this is John Wellschlager's last meeting as a TMT member; she thanked him for his hard work, insights and willingness to work closely with the other members of the team, and wished him well in his next assignment, sentiments echoed by the other TMT members present.

7. Next TMT Meeting Date.

The next meeting of the Technical Management Team was set for Wednesday, June 28. Meeting summary prepared by Jeff Kuechle.

TMT Participant List June 12, 2006

Name	Affiliation
Donna Silverberg	Facilitation Team
Russ Kiefer	IDFG
Cathy Hlebechuk	COE
David Wills	USFWS
Rick Kruger	ODFW
Paul Wagner	NOAAF
John Wellschlager	ВРА
Tony Norris	USBR
Dan Spear	ВРА
Kyle Dittmer	CRITFC
Barry Espenson	СВВ
Scott Boyd	COE
Russell Langshaw	GCPUD
Margaret Filardo	FPC
David Benner	FPC
Russ George	WMCI
Robin Harkless	Facilitation Team